

# REDUCING MUSCULOSKELETAL DISORDERS (MSDs) BY MITIGATING ERGONOMICS RISK FACTORS ON CONSTRUCTION SITE

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**DEDICATION**

*Mom and Sisters,  
Your Endless Love and Pray Was Endless*

*Dad,  
You're Dua' Shine to Me from Heaven*

*Hafizul,  
You'll Always being my backbone*

*Friends,  
Thank you for being my four leaf clovers that hard to find  
and I'm lucky to have all of you*

*My Supervisor,  
You Have Driven Me to the Truth That You Could*

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## **ABSTRACT**

Injuries have been recognized as serious issues on construction site. The aim of this research is to reduce Ergonomics Risk Factors (ERF) on construction site by mitigating ERFs on construction site. Literature review was carried out and questionnaire formulated and distributed on construction site around Johor Bahru. The data collected was analyzed by using HIRARCH. The result showed that performing motions constantly without short pause or break in between task, tools weight is too heavy and working by doing the same motion over and over again was being the high risk on construction site. Therefore, to reduce Musculoskeletal Disorders by having necessities of communication network at site, top management controls, preparing some training and education program, and also wearing the proper Personal Protective Equipment (PPE) on construction site.

## **ABSTRAK**

Kecederaan telah dikenalpasti sebagai isu yang serius di tapak bina. Tujuan kajian ini adalah untuk mengurangkan Faktor Risiko Ergonomik (ERF) di tapak bina dengan mengatasi ERF di tapak bina. Kajian literatur telah dijalankan dan soal selidik telah diformulasikan dan telah diedarkan di tapak pembinaan di sekitar Johor Bahru. Data yang diperolehi telah dianalisis dengan menggunakan HIRARCH. Hasil soal selidik menunjukkan bahawa dengan melakukan gerakan yang kerap tanpa mempunyai masa rehat mahupun berhenti seketika ketika melakukan sesuatu tugas, alatan kerja yang mempunyai berat yang berlebihan, dan bekerja dengan melakukan pergerakan yang sama berulang-ulang kali telah menjadi antara risiko yang tertinggi di tapak bina. Oleh yang demikian, untuk mengurangkan gangguan kesakitan yang berpanjangan adalah dengan mempunyai keperluan rangkaian komunikasi yang teratur di tapak bina, kawalan dari pihak pengurusan, penyediaan beberapa program dan latihan, dan juga akan pemakaian Peralatan Perlindungan Peribadi (PPE) dan seterusnya akan dapat mengurangkan gangguan muskuluskeletal (MSDs).